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Local Content in Developing and Middle-Income Countries: Towards a More Holistic Strategy

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Abstract

This introductory piece introduces papers compiled for a special section of *The Extractive Industries and Society* on local content. This introductory paper situates these pieces in the wider literature and policy debates on local content in the extractive industries in developing economies. Local content requirements (LCRs), which seek to create value locally, tend to be driven by state-owned enterprises (SOEs) and agencies which work alongside multinational companies (MNCs) in the mining and oil and gas sectors, civil society and multilateral organisations. For states, the establishment of SOEs and other government bodies needed to implement local content is a key to building a robust indigenous technical base for, and building domestic linkages to, the extractive industries. The paper concludes by prescribing recommendations on how to develop LCRs which create public value for a diverse group of stakeholders linked to the extractive industries.

Keywords: Local content, extractives, mining, oil and gas

1. Introduction

Local content requirements (LCRs) have rapidly gained currency as a strategy to stimulate development in states dominated by large-scale mining, and/or oil and gas production.

LCRs are part of a broader set of ‘localisation’ policies that favour domestic industry over foreign competition, requiring companies and the government to use domestically-produced goods or services as inputs” (OECD, 2019, np). On the whole, as noted by many of the authors in this special issue, local content as a development strategy in the extractive industries is a 21st century manifestation of resource nationalism. In extractives, the movement to adopt LCRs came to prominence toward the end of the most recent commodity price boom that ended in 2014. They can also be understood as part of a larger trend against neoliberal globalization that has seen protectionism being advocated by governments across the political spectrum, not only in developing countries but more recently in the US and UK with Donald Trump’s insistence on “making America great again” and the successful “Brexit” campaign to take the UK out of the European Union.

While such protectionism has not been seen in advanced industrialized states since the Jones Act (Section 27 of the Merchant Marine Act of 1920, USA) and the Buy British Community’s campaign for “Made in Britain, British-made” goods, LCRs have been in existence for some time and in a myriad of forms. Only recently have they become popular in the extractive industries in developing world settings, championed as a solution to the “resource curse” that continues to plague a range of countries, including the likes of Nigeria, Angola, Ghana and Venezuela (Auty, 1993, 2007; Kolstad and Wüig, 2009; Pegg, 2010; Graham and Ovadia, 2019). These countries are endowed with significant minerals and/or oil and have up until now permitted multinational companies to make payments directly to governments in exchange for repatriating billions of dollars in profits. The concern, however, is that the monies retained in the form of taxes and royalties, though considerable, have failed to catalyse the development of local upstream and downstream industries, nor foster economic development on the whole (Hilson, 2013; Ovadia, 2016a; Hilson et al., 2019).

Historically, protective measures have been used to facilitate the diversification of productive sectors of resource-dependent economies to hedge against the risk of fluctuating commodity prices (Forbes, 2013). The establishment of the World Trade Organisation (WTO) in 1995 resulted in countries easing protectionist measures such as LCRs (Fouda, 2012; Rodrik, 2017). In recent years and on the back of increasingly strong civil society voices supported by easy access to information via social media and other types of technology (Stone, Messent and Flegg 2015), governments in several extractive industries-oriented countries have implemented LCRs in an attempt to ensure that proceeds from operations stimulate growth in local enterprises and build a technical skills base in the local population. While some of these LCRs are prescribed but are voluntary measures (e.g. LCRs in Trinidad and Tobago are non-binding; there are no legal LCRs in the Philippines), current trends have seen LCRs being enshrined in local legal frameworks (e.g. Botswana, Norway and Ghana) which encompass regulations, contracts and bidding processes (Ovadia 2014, 2016b; Oyewole, 2018). Figure 1 offers a pictorial view of countries with LCRs linked to extractive industries.

[Insert map here]

For the most part, LCRs are context-driven and vary according to the extractive industries sector, country and at times, economic region. However, in the extractive industries, LCRs typically encompass a combination of targets for the employment of indigenes, transfer of technology to local operators, transfer of industry knowledge to indigenes, the conduct of research and

development in-country and mandatory indigenous equity stakes in procurement contracts and new exploration and production activities (Hilson 2014; Tordo et. al. 2013). To ensure compliance, stringent reporting and monitoring mechanisms accompany these requirements. In some countries, punitive measures such as fines and imprisonments are put in place to ensure MNCs comply.

While some of the objectives of LCRs have been realised in some developing economies (e.g. Norway, Malaysia), the targets set by others have proven to be excessively lofty and have rendered any realisation of the goals driving such policies highly elusive (Mancini and Paz, 2016; Lange and Kinyondo, 2016; Ovadia 2014, 2016a). Underlying the mediocre outcomes of such requirements is the fact that many of these policies have been conceived without careful consideration of the needs of communities whose lives are most affected by the extractive industries (Ovadia et. al. 2020; Ackah and Mohammed, 2018; Balag'kutu, 2017; Verbrugge, 2017; Ablo, 2015; Hilson 2012). Even more perplexing is the fact that the outcomes that these requirements were expected to yield have proven unsustainable as the elitists within host countries have continued to flourish under policies that were intended to ensure equity (Geenen and Cuvelier, 2019; Lange and Kinyondo 2016; Ovadia, 2014).

This special issue reflects critically on the state of LCRs in the extractive industries across various developing countries. A wealth of knowledge is presented here in areas such as the role of civil society in LCRs, the unintended consequences of ill-conceived policies, the growing role of LCRs as new industrial policies, the central role of the state in globalization, and the emerging role of state-owned companies and state-led investments. By critically analysing and reflecting on the *status quo*, the authors have been able to move towards best practices and prescribe some mechanisms that will improve on the current development and delivery of LCRs. This paper begins by bringing together the various global perspectives on LCRs and fleshing out the primary provisions of requirements. It then proceeds by examining the rationale behind the increasing responsibility assigned to state-owned enterprises (SOEs) in the extractive industries and their focal position in the development and monitoring of LCRs. In an attempt to expand the theoretical underpinnings and orientation of LCRs, we consider the role of SOEs in creating public value through the lens of Moore's (1995) "Strategic Triangle" framework. On this basis, we contend that as the roles of the state and SOEs are pivotal to realising LCRs, their current operational methods and how their structure falls significantly short of the expectations and demands of this useful but highly criticised approach to public management. In our discussion, we consider the blurred lines between Corporate Social Responsibility on the one hand and LCRs on the other hand. This is an issue that has become contentious in the debate on LCRs. In bringing our discussion to an end, we consider ways through which public value can be co-created through LCRs and offer suggestions on how this can be achieved through engaging a variety of stakeholders in a democratic process.

2. Reflections on the state of LCRs in the Extractive Industries

Before LCRs began being promoted as a local industry protectionist model in the extractive industries, many countries endowed with hydrocarbons and/or mineral wealth saw little to no development of upstream/downstream industries. Longitudinal analysis put forward by pioneering economists and political scientists (e.g. Singer, 1950; Prebisch, 1950; Hirschman, 1958) raised awareness of how the lack of economic development witnessed in resource-rich countries in Africa, Asia and Latin America lack of economic development in regions is a result of weak institutions and minimal effort make large-scale mining, and oil and gas production catalytic economic engines. These countries have rather become what Ferguson (2005) labelled resource "enclaves": areas of production into which capital "hops" in from Western economies, and back out again, with little development in-between.

Today, there are over 49 countries, globally, with LCRs linked to their extractive industries. As will be explained in Section 4, the policies in which these are embedded have been implemented with mixed success. Some believe that the design of LCRs should be left to the private sector as it is better positioned to deliver value to the entire economy. Others believe that LCRs are in direct conflict with WTO rules on trade liberalisation, and that such policies stifle competition and profitability (Cimino et. al., 2014; Veloso, 2006; Bhagwati, 1988). Yet, strong civil society voices and the lukewarm interest of multilateral institutions have continued to encourage governments in these countries to forge ahead with local content policies. In Ghana, for example, it was reported that oil and gas MNCs strongly resisted the passing of LCRs as they included clauses which could lead to the imprisonment of company officials for non-compliance (Ackah-Baidoo, 2012). If, in the face of such opposition, Ghana passed its regulations then it can be assumed that LCRs would continue to be central to industrialisation efforts of developing economies.

In most countries that have implemented LCRs for the extractive industries, a SOE or other parastatal organization is typically charged with their implementation, monitoring and associated reporting. In many cases, the SOE is established or rejuvenated to work alongside MNCs in the extractive industries in order to manage the state's interests and to ensure that it acquires industry knowledge and technologies. This is done with the view that these SOEs, over the long term, will become self-sufficient and independent companies capable of competing at the same level as their international private sector counterparts. If well-developed and supported, these SOEs could add significant value to state coffers and serve as a source of employment for many citizens.

Globally, the roles played by SOEs are expanding as many are de-risking by issuing shares on publicly traded markets. Norway's Statoil (now Equinor), which successfully went public in 2006, continues to make profitability strides. While such success stories of going public have provided a source of inspiration in many mineral and/or oil and gas-rich developing countries, many with LCRs now in place have struggled to achieve comparative success. We contend here that, SOEs and, where applicable, other government agencies, have an important role to play if LCRs are going to be successful. Specific unorthodox policies may have guided the activities of some of the SOEs that have gone public. However, there were particular measures taken by countries which have managed successfully SOEs linked to their extractive industries to ensure that the utmost possible public value has been achieved from their economic activities. In light of this, our discussion focuses on clarifying the role of state agencies and SOEs in the development of LCRs and corresponding value-addition.

In the next section of the paper, we draw on some examples contained within the literature which capture how SOEs linked to the extractive industries have contributed to the development of, and realisation of the goals set within, LCRs. The objective is to identify the reasons for, and barriers to, success. We then briefly appraise existing interactions between SOEs and state agencies and LCRs' potential for public value creation using Moore's (1995) strategic framework. In doing so, we use SOEs and state agencies as a proxy for the public manager who is tasked with creating value for the citizenry. This is in recognition of the immense contribution that extractive industries could make to the poorest of economies and the pivotal role that SOEs and state agencies, if well managed, can play in the national value-creation process.

3. State Owned Enterprises and Local Content Requirements

In December 2019, Saudi Aramco, the state oil company of Saudi Arabia, issued an initial public offering (IPO) that provided an opportunity for public ownership of the shares of an SOE. Prior to this announcement, the activities of the company and its operations were mostly shrouded in secrecy. At the time, it was considered the world's most valuable company with a US\$2 trillion valuation.

The tale of Saudi Aramco is not a unique case, however, in the context of the general path followed by SOEs in developing and emerging economies. Ownership is typically partially diluted once the SOE becomes anchored in the sector. In the case of mining, most of these SOEs are the state’s representatives in negotiations over mineral exploration agreements. Moreover, they are often party to oil exploration and mining agreements, form joint ventures with MNCs, assist in the regulation of activities, and in many cases, are responsible for overseeing the fulfilment of LCRs. The role that SOEs play makes them major stakeholders in the public value creation process. But as entities which try to take on the dual role of independent “corporations” and state entity, their activities are said to be overshadowed by political influences which render internal control systems illusive (Rahim et. al., 2015; Zhou and Tian, 2013; Bhati and Sarwet, 2012).

The most successful SOEs are those that have navigated this dual role effectively and produced entities which are self-sufficient and thriving. Studying public value creation in a number of oil and gas SOEs, Tordo et. al. (2017) found that the following features are critical to value creation:

- A robust internal governance structure;
- The size of the resource endowment correlates with the efficiency of the SOE. Countries with small resource endowments are better at creating value than those which large endowments;
- States which impose temporary restrictions on the activities of oil and gas MNCs in favour of SOEs have paved the way for the rapid development of such SOEs. The nature of these restrictions is in line with the general stipulations of LCRs; and
- An alignment of SOE objectives with the goals of the state, which ensures that there is little political friction.

A further study conducted by the United Nations Conference on Trade and Development (UNCTAD, 2013) found that even in the weak institutional environments of developing economies, LCRs can be effective in value-creation.

Table 1: Overview of local content policies driven by SOEs in selected countries

	Saudi Arabia	Malaysia	Botswana	Chile
Industry	Oil and gas	Oil and gas	Mining	Mining
SOE	Saudi Aramco	Petronas	Debswana	Codelco
Type of local content requirements	Formal	Formal	Formal	Informal
Employment requirements	✓	✓	✓	
Procurement requirements	✓	✓	✓	✓
Training requirements	✓	✓	✓	✓
Technology transfer requirements	✓	✓		✓
Monitoring and enforcement requirements	✓	✓	✓	✓

Table 1 summarises the nature of LCRs being employed by selected countries which have SOEs at the heart of their oil production and mining activities. As the table indicates, in Malaysia and Saudi Arabia’s extractive industries, LCR requirements encompass all of the major categories listed. Both countries set employment creation targets and have procurement, technology transfer and training requirements. The success of both of these SOEs have been driven by joint ventures with oil and gas MNCs, the state’s investment in research and development initiatives and ensuring that procurement in the industry creates opportunities for locals (Olawuyi, 2019; Anon, 2018).

Saudi Aramco has created value through the construction of schools, hospitals and sports stadiums in the country (Raval and Kerr, 2019). Chile and Botswana have four out of the five LCRs listed in the table. For these two countries, the level of success of their SOEs has not been as comprehensive as that of Malaysia and Saudi Aramco. We discuss each of these countries in detail below.

3.1 Public value creation and LCRs: Saudi Aramco

Saudi Arabia has the world's second largest oil reserves. Contrary to assertions made by Tordo, et. al. (2015) that the size of the endowment will limit the country's ability to create public value, Saudi Arabia has done just this through its LCRs. Saudi Aramco, which is the main SOE in the oil and gas industry of Saudi Arabia, is at the centre of the country's LCR agenda. In 2015, Kingdom Total Value Add (IKTVA) was established as an enhanced version of previous localisation rules which governed the operations of the French state oil company AUXIRAP in the country (APICORP, 2017). The new LCRs set targets for training and employment of locals, transfer of technology and monitoring mechanisms. One of the major goals of its LCRs is for Saudi Aramco to create value by procuring up to 70% of its goods and services locally (Nasser, 2018).

As with most SOEs, the objectives of Saudi Aramco are closely aligned with the national objectives of Saudi Arabia. In fact, the relationship between Saudi Aramco and the Saudi Ministry of Energy was often criticised as being very blurred (Mahdi, 2018; APICORP, 2017). Similar criticisms are often made of Sonangol in Angola (Ovadia, 2013b). It is common knowledge that the political environment in MENA countries makes it very difficult for their business operations to be perceived as being transparent. For Saudi Aramco, being controlled by the Saudi royal family meant that not all details of business activities were subject to disclosure requirements. The corporate governance structures at the inception of Saudi Aramco changed when the entity became nationalised in 1980. At this point, its strategic direction changed so much that quarterly financial reports were no longer mandatory or issued, the board expanded to include more Saudis and the management processes became more aligned with political heads of the Saudi Ministry of Energy (Mahdi, 2018). On the run-up to the IPO, several corporate governance structures had to be put in place. International standard financial and corporate responsibility disclosure mechanisms were implemented, changes were put in place to ensure that the company's dealings with the Saudi Ministry of Energy were at arm's length. Additionally, in 2018, the company diversified its board to include women and two other non-Saudi corporate executives. One of the major goals of its IPO was to strengthen its governance structures (Raval and Kerr, 2019) in order to transition the company from an exclusive focus on drilling to refining oil and to achieve its localisation objective of procuring up to 70% of its goods and services locally (Nasser, 2018). Today, the diversified 11-member board consists of five non-Saudi corporate executives, a sign that the company is streamlining its corporate governance structures.

3.2 Public value creation and local content requirements: Petroliaam Nasional (PETRONAS)

Malaysia's LCRs have been heralded as embodying some of the industry's best practices but it has been a steep learning curve for the country with the state oil company Petronas at the centre of it. As in Saudi Arabia, Malaysia's LCRs encompass employment, training, technology transfer and procurement requirements as well as mechanisms for monitoring and reporting. Having a small endowment of oil meant that Malaysia's value creation efforts had to be carefully crafted in order to maximize value from the industry. For Petronas, too, putting in place good corporate governance structures was a key feature in creating value by building an entity which would be capable of competing at an international level. Hassan et. al. (2015) report that following the 1997 financial crisis, Malaysia started to take corporate governance very seriously. As such, post-1997, the state established the Finance Committee on Corporate Governance and subsequently the

Capital Markets Strategic Committee in 1999. Some of the key corporate governance issues addressed by these organisations were that listed companies had to disclose their level of compliance with particular recommended guidelines which would ensure corporate accountability and governance capable of strengthening investor confidence (Rahim et al., 2015). Like all organisations, Petronas was subjected to the same guidelines.

As a catalyst for the realisation of LCRs, Petronas has a vendor development programme (VDP) with other oil and gas companies in Malaysia. In 2018, Petronas launched its VDPx programme with the aim of creating a pool of profitable vendors and nurturing micro local entrepreneurs to overcome high-entry barriers in the industry and create a pool of vendors who can generate value (The Star, 2018). Since the Petronas VDP was set up in 1993, it has assisted in prospering 99 local companies and awarded contracts worth more than RM8.3bil. As a forerunner in social value creation, Petronas also focuses on contributing to the education and human capital development of the Malaysian public. In this capacity, Petronas has made a significant contribution to the reduction of Malaysia's inequality gap (Yusoff, 2018; Juda et al., 2015).

Petronas was established with a clear goal of it running like any other private business, despite it being for the country of Malaysia. It maintains a degree of independence from the nation's political leaders, retains its profits and pays the state, its sole shareholder (Varkkey, 2015, Von Der Mehden and Troner, 2007). Today, Petronas has exploration activities in Vietnam, Myanmar and Sudan, among others, and continues to make a significant contribution to the nation's GDP.

3.3 Public value creation and LCRs: Codelco

Codelco (*Corporación Nacional del Cobre de Chile*) is the Chilean national mining company. Like Saudi Aramco and Petronas, Codelco is a major contributor to its nation's GDP and value creation efforts, facilitated by LCRs. It was formed in 1976 following the nationalisation of foreign-owned mining operations in the country. It is the world's largest producer of copper (EITI, 2017) account for approximately 10% of production. Outright nationalisation was not effective in transforming the industry; in 1995, therefore, Codelco was mandated to form joint ventures with foreign companies (Odendaal and Dolo, 2018). It was due to an increased presence of mining MNCs in Chile, however, that the SOE really took off. As part of its efforts to increase public value, it participated in a supplier development programme with BHP Billiton.

To achieve its currently revered status, Codelco had to be changed from being fully governed by the prevailing president into a state-run enterprise with a governing body comprised of nominated and appointed state public managers, representatives from the president's office and two workers' representatives. This body consists of three directors directly appointed by the President of the Republic, four directors appointed from among a 5-candidate list selected by the Senior Public Service Council; one director chosen from among a 5-candidate list presented by the Copper Workers Federation (FTC); and one director selected from a five-candidate list jointly presented by the Copper Supervisors Federation (FESUC) and the National Association of Copper Supervisors (ANSCO) (Codelco, 2015). This orientation towards establishing a stronger board was enshrined in Law N° 20.392 of 2009. Codelco strengthened its corporate governance when Chile became part of the OECD in 2010. As part of becoming a member, Codelco had to adhere to international corporate governance guidelines for state institutions.

In addition to creating public value through creating a formidable local supplier base, Codelco's cash contributions to the state coffers over the years have been used to construct hospitals, develop upstream mining linkages, launch research and development initiatives, and build local technical capacity and provide disability support.

3.4 Public value creation and local content requirements: Debswana

Botswana's mining SOE, Debswana Diamond Company (Debswana) started off as the De Beers Botswana Mining Company in 1968. In 1975, a joint venture agreement was reached between De Beers and the Government of Botswana, which officialised each party holding a 50% stake in the company.¹ The name of the company was changed to Debswana in 1992, following the acquisition of 5% of De Beers Holding Company by the De Beers Botswana Mining Company, which also entitled the Government of Botswana to have two representatives on the board.

Debswana's strength and its ability to create public value seems to lie in the company's objectives being aligned with the national policy and its use of a strategic partnership. This was especially the case when the state had to negotiate a beneficiation programme with De Beers in the 2000s prior to renewing De Beers' mining licenses (Maennling and Toledano, 2018). This led to the establishment of the Diamond Trading Company of Botswana (DTC) in 2008. At the same time, the company strengthened its corporate governance processes and streamlined its operations.

Through its joint venture agreement with De Beers, Debswana was able to respond to the HIV/AIDS epidemic that engulfed the country by extending care to its employees and their families (African Development Bank, 2016), construct hospitals, and create and further employment opportunities for the people of Botswana supported by the government's open investment climate that brought in polishers and cutting companies. At the heart of the beneficiation project was a desire to strengthen the ability of small and medium scale enterprises to drive industrialisation in the country. (Sekwati, 2010) The project led to the creation of several small and medium scale enterprises and the formation of several second-tier supply industries in the mining sector (Spektorov et al, 2013; Maennling and Toledano, 2018). Overall, Debswana was instrumental in addressing the HIV/AIDS problems that the nation encountered (Olawuyi, 2019). In recent years, the country as a whole has implemented various supply and demand side policies with its Economic Diversification Drive (EDD) programme. However, its economy is still dependent on the diamond industry. The ability of its SOE to sustain its ability to create public value, therefore, has become even more important.

In summary, deliberate policy interventions, robust governance systems, a commitment to developing and supporting local suppliers in upstream/downstream industries and the development of the necessary infrastructure are vital to value creation in this context. The papers presented in this special issue of *The Extractive Industries and Society* highlight the degree to which these important variables have informed the LCR value creation process in various developing countries.

4. Oil Wine in New Bottles? Fresh Policies and an Established Model of Value Creation

Mark Moore's 1995 landmark book *Creating Public Value: Strategic Management in Government* (Moore, 1995) brought to light a normative approach to public decision making. The author is seen as a trailblazer in debates on public value creation: he sought to enhance the democratic process by advocating for public managers to create public value through the resources they control. Moore's focus was on how public managers should think and do in order to create value. In a subsequent seminal book, *Recognizing Public Value*, Moore (2013), expanded his previous framework for creating public value, the 'strategic triangle,' introducing a Balanced Scorecard idea for public value creation (after Kaplan and Norton). Figure 1 summarises Moore's ideas about how "performance measurement, accountability and performance management systems" can be used by public managers to reflect and learn from previous decisions when strategizing to create value in a

¹ Retrieved February 13, 2020 from <http://www.debswana.com/About-Us/Pages/Our-History.aspx>.

democratic society (Moore 2013, p. 102). In this regard, public managers are able to enhance the value they create when there is legitimacy and public support for their actions and they have the requisite technical capacity to accomplish the task.

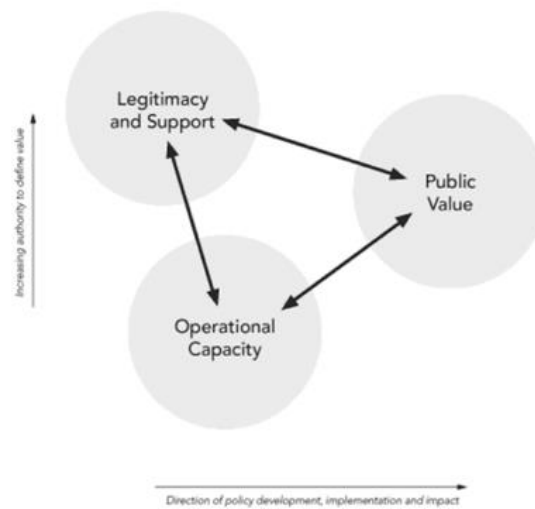


Figure 1: The Strategic Triangle (source: Moore, 2013, p. 103)

Moore (1995; 2013) was of the opinion that transposing a private management and performance evaluation model into the public sector will produce public value that truly satisfies the customer (the general public) and exhibit the values of *truth* and *fairness* while at the same time giving public managers a high level of job satisfaction. Hence, the three pillars in the model, Legitimacy and Support, Public Value and Operational Capacity, represent the core themes that public managers must answer in order to create value that truly meets the public need. In the author’s view, public managers must think about the value they are seeking to create, where legitimacy and support will come from and the type of operational capacity they will require, in tandem, when formulating any strategic decisions.

Moore’s (1995) triangle is perceived as being prescriptive, in that he does not concern himself with why organisations behave the way they do or why managers think the way they do (Rutgers, 2015; Benington 2009; Bryson et. al., 2017; Fukumoto and Bozeman, 2019; Bracci et. al., 2019). It is in this vein that his work has been criticised by many who believe that co-creation of value should extend beyond the corners of public organisations, civil society and elite stakeholders to include those who are most affected by the outcomes that public management purports to realise (Power, 1999; Dahl and Soss, 2014; Kavanagh, 2014; Crosby et. al., 2017). Despite these criticisms, the idea promulgated by the model and supported by subsequent work on public management (Benington and Moore, 2011; Bryson et. al., 2017) could potentially shed light on how most of the bureaucratic engines in developing economies operate and by extension render policies which are a far cry from that which are believed to have “co-created public value”. It is the fact that Moore’s (1995) focus is on the process of generating public value and not necessarily the outcomes (Sam, 2011); this is why it seems to be a useful model to understanding the current effects of LCRs.

The papers in this special issue cover global experiences of LCRs in developing economies. The overarching theme in this special issue is the role that states and their SOEs play in exerting influence over value chains of MNCs, acting as lead firms in production networks, and over the implementation of industrial policy by state agencies. There is general agreement among authors that LCRs are a response to the failures of neoliberalism and that a one-size-fits-all approach minimises their effectiveness. Authors also agree that technology and human capital development

are imperative to addressing market failures and that direct environmentally-friendly investments are key to ensuring the effectiveness of LCRs. Divergent views are expressed on several issues, however, including:

- The disparities in power among actors in the development and implementation of LCRs;
- how to deal with different actors/stakeholders, competing interests, elites and politics in the design and implementation of LCRs;
- How policy weaknesses are amplified by ambiguities in the definitions and design of LCRs;
- The extent to which quotas and targets are disconnected from local capacity and input;
- The lack of consistency in the role that civil society organizations play in the design and implementation of LCRS; and
- Whether hard policies are necessarily protectionist or against competitiveness.

In this section of the paper, we draw on these arguments to make sense of the outcomes of existing LCRs by considering which stakeholders were involved in developing them, the targets set and the context in which they were formulated, the legitimacy and support for these interventions, and the value created so far. We employ the concepts of legitimacy, support and organisational capacity in the same ways in which Moore (1995; 2013) uses them.

4.1 Legitimacy and Support

Moore (1995; 2013; 2014) takes a holistic approach to understanding the public manager's perspective of legitimacy. The author argues that for public value to be created, the values of the general public should be reflected in the choices that public managers make. At the heart of value creation is the call for all public "voices" to be heard (Hastings and Weate 2018). No distinction is to be made between the *weak* and *powerful* nor the *leader* and *subordinates*. This means the public manager's goal is to seek legitimacy and support from the entire public on any project he or she is involved with. The extent to which this can be achieved will obviously differ. Hence an approach to developing and implementing LCRs which involves engagement and consultation with civil society, affected communities and other relevant stakeholders may serve as a rudimentary proxy for achieving societal "legitimacy and support". Many caveats to positive outcomes of LCRs have been put forward by the authors in this special issue. Broadly, these include the influence of political elites, a disconnect from affected communities and a perceived salience of multi-lateral organisations. Dunbar et. al. (2020) provide a viewpoint on the need for new models in mining which encompass local procurement. The second paper in this special issue, by Kragelund (2020), sums up these broad issues by looking at outcomes of Zambia's LCRs. The author identifies imbalanced power relations between the state multilateral organisations and MNCs in the extractive industries; the lack of operational capacity of local suppliers; and global multilateral policies that see governments adopting policies that run counter to the rationale behind LCRs, thus undermining them. The remainder of the papers in this special issue inform these broad categorisations.

4.1.1 *Influence of political elites*

In many developing countries, LCRs have been described as lopsided public wealth creation ventures because they have mostly been designed to be led by bureaucrats when in substance, they are just a front for the political elite (Ovadia 2013a; 2013b). In the extractive industries, public managers play a critical role but their reach and ability to create value is limited as institutions are weak and there is widespread corruption (Kopinski, 2018; Lima-de-Oliveira 2015). The ability of

public servants to enforce regulations is weak. In fact, the lack of commensurate economic development in prolific mineral-producing economies corroborate this assertion. Within such contexts, how is the right level of legitimacy and support for LCRs arrived at? Most of the countries discussed here operate within a unique political paradigm – one in which the lines between the executive and legislative arms of government and that of public servants is blurred. Here, political elites are the front-runners in determining what LCRs will encompass and how effectively compliance will be monitored.

Moreover, emerging in the local content debates on oil, for instance, is the role of National Oil Companies (NOCs). These are often the leading negotiator in contracts, biddings and LCRs. On the surface, it seems that the leaders of these organisations are apolitical. However, the scandals that have plagued the likes of Petrobras and the oil and gas industry in Nigeria (Kalyuzhnova and Belitski, 2019; Nwapi 2010) debunks this myth. It is to the political elite that legitimacy is perceived to be owed and not the general public.

The third paper in the issue by, Lima de Oliveira (2020), reveals how the elites in Brazilian society positioned Petrobras to secure unlawful gains from contracts. Prior to becoming an established SOE, Petrobras had taken an inventory of its limited operational capacity and had worked with the nation’s universities and suppliers to develop industry leading R&D capabilities. Despite its initially good track record of developing local suppliers, Brazil was still importing a significant amount of its energy requirements. The state subsequently opened the market to international private investment with a promise to provide an even playing field in the bid for contracts from local and international suppliers (see Filho et. al., 2019). The ruling elite at the time used their political influence to appoint individuals into key positions in the industry. This created various opportunities for the elite to siphon significant amounts of money in the form of kickbacks and bribes. Lima-de-Oliveira contends that Brazil’s original LCRs, which were multi-stakeholder led, with modest targets, although voluntary in the beginning, evolved into achievable mandatory goals while the politically-driven lofty LCRs set by Petrobras failed to do the same.

Evidence from Ghana presented by Ayanoore (2020) in the fourth paper of this issue further amplifies the problem of elite capture and local content. Using content analysis and data from interviews with officials at the Ghana National Petroleum Corporation (the country’s SOE), the two main state agencies charged with promoting local content, legislators, civil society organisations and IOCs, the author argues that elitists’ control of LCRs in Ghana can be contextualised through the lens of the political settlements framework (after Khan 2010). Within this crucible, the ruling elite seek legitimacy and support from the “powerful” stakeholders in society: for it is in doing so that they can hold on to power. Such “powerful stakeholders” include IOCs and local elites. Ghana has set ambitious targets in its LCRs. The management of IOCs lobbied for the ruling elite to dilute these targets but efforts were blocked by a dissenting civil society voice. But such moves made to ensure “true” local participation in the industry, although laudable, have been undermined by contracts being funnelled to associates of the ruling elite.

4.1.2 Disconnection from affected communities

In addition to elite capture, a significant concern arising from LCRs is their disconnection from affected communities. A distinguishing attribute of most democratic systems is transparency and accountability. Here, public voices play a major role in shaping policies (Bryson et. al. 2017; Duijn and Van Popering-Verkerk, 2018). In OECD countries, for instance, different forms of decentralised political governance systems exist (Allain-Dupré, 2018) which enable communities to be consulted on key issues that concern them. Furthermore, there is high degree of transparency and accountability in how governments run. In some OECD economies, minutes of local government meetings are available for public viewing and members of the broader society are

used as volunteers to help local government to overcome the financial burdens which often result in such economies accumulating large budget deficits.

In the likes of sub-Saharan Africa and some parts of Asia but less so in Latin America, decentralisation exists yet, the resulting consultations do not actually take place for public-driven projects. In fact, there is no appetite to do so within political and public circles. Reports on consultations with local communities are, for the most part, carried out to sensitise them to the effects of extractives on their livelihoods (Ackah-Baidoo, 2012; 2013). To public managers in such environments, affected communities are not important stakeholders in the development of LCRs (ibid). In the fifth paper of this issue, Atienza et. al. (2020) capture how “spatially blind” local content policies reinforce regional inequalities within countries. They use mining in Chile as a case study to illustrate the consequences of LCRs being conceived at a national level, specifically how regions, cities and affected communities are oftentimes completely ignored in decision-making processes. This is one of the legacies that current LCRs have left behind in several countries around the world (Ackah-Baidoo, 2012, 2013; Nwapi, 2015).

From the perspective of the OECD (2011), rent seek by “capital city elites” is manifested in how policies concerning all areas of public life are spatially blind. Effectively, the disconnect between public managers and affected communities is embedded in ill-conceived LCRs which do little to address the needs of those most affected by extractive activities. Atienza et al. (2020) demonstrate how little meaningful impact LCRs in the extractive industries in Chile have had on remote regions of the country. According to the authors, LCRs in Chile are not driven by policy and are therefore applied by stakeholders merely as a means of securing a *social license to operate*. As a result, Chile’s public value creation leaves much to be desired. The industry has developed as an enclave (after Ferguson 2005) with very few forward and backwards linkages to the wider economy. Mine output from MNCs is circa two times bigger than indigenous output. Two major supplier development programmes, a partnership between MNCs and state institutions, have failed to address the issue of “spatial blindness” in that indigenous suppliers in the actual mining regions are satellites of companies in the capital of the country and therefore lack transformative capabilities. Specialised technological and knowledge transfer, exploration and engineering skills are highly concentrated in the Metropolitan Region while low level activities such as general repairs and maintenance and minor construction services are mostly undertaken in mining regions. Failure to include extractive regions in LCRs further aggravates rent-seeking behaviour and calls into question the meaning of the term “local” in these policies.

4.1.3 *Perceived salience of donors, multi-lateral organisations and MNCs.*

It is no secret that multilateral institutions are critical partners in most extractives industries in developing economies. In regions where often the technical skills required to bid for large contracts, manage negotiation processes and operate extractive industries is often lacking, donors and multilateral organisations often provide such assistance at the outset. Indeed, organisations such as the World Bank and its financial arm the International Financial Corporation (IFC) have paved the way for several multinational extractive firms to conduct business in several developing countries. The World Bank and the IFC have been significant supporters of LCRs and have assisted many countries in developing such requirements (Ackah-Baidoo, 2012).

Byaruhanga and Langer (2020), in the sixth paper in this special issue, study how power networks influence the implementation of LCRs in Uganda’s nascent oil and gas industry. They find that in applying the countries’ LCRs, various ambiguities which affect value creation become evident. Poorly-formulated LCRs have resulted in multiple and conflicting interpretations of the policy by different actors. The ambiguities underscore the lack of a consensus on the definitions of “local company and local goods and services”. The policy, although geared toward enhancing local

capacity, requires that indigenous suppliers to the industry have high levels of quality, health and safety thresholds as well as previous industry knowledge, which is a barrier to entry for most local suppliers. These ambiguities have enabled non-Ugandans to register oil and gas service companies. Policy ambiguities and actor self-interests drive how LCRs are interpreted and re-negotiated. *Powerful* stakeholders (i.e. state institutions and IOCs) use their resources and influence to gain control of the re-negotiation process around implementing LCRs. This adversely affects the ability of local actors such as civil society and local companies to influence the implementation process. In Uganda, LCRs do not effectively create public value and as a result, IOCs are selective in their choice of local suppliers, often gravitating towards those who to them, promise higher profit rather than to those which will benefit from knowledge and technology transfer. Suppliers from oil communities seem to be excluded from contracts because of the way the policy is being applied.

Despite the critical role it plays in ensuring FDI inflow into developing economies, the World Bank has a peculiar strategy in these economies that affects the legitimacy of the value creation process. For instance, at the onset of “First Oil” in Ghana’s oil and gas industry, the IFC was a creditor to the operators of the Jubilee field (Ackah-Baidoo, 2012); the World Bank was financing capacity building in various ministries in the country; and was also funding the activities of the oil and gas platform, a consortium of NGOs in the country. Clearly, in the formulation of LCRs, this multi-faceted role played by the World Bank presented clear conflicts of interest.

Caramento (2020) evaluates the efficacy of LCRs in Zambia’s copper mines in the seventh paper in this issue. In the author’s view, LCRs are a response to neoliberal structural adjustment (World Bank policies) and privatization in the country. In the Zambian case, it is explained, donors such as the World Bank and the UK Department for International Development advocate for LCRs which are often too “soft”, voluntary and MNC friendly. Caramento argues that this is problematic and counterproductive to realising true public value creation. The author contests that “hard” LCRs facilitate the development of local enterprises by stimulating the right levels of “market facilitating industrial strategies” required for pushing forward the national agenda. He identifies policy coherence and coordination, regulatory capacity, elite politics and the procurement strategies of MNCs as obstacles to LCR-driven public value creation. To address these issues, Caramento argues that a developmental state that will advance resource nationalism and implement measures that challenge entrenched interests will achieve meaningful public value.

On the other side of the spectrum is what happens to public value creation when states accord great salience to donors, multilateral organisations and extractive MNCs without positioning themselves to contribute to the value creation agenda. Ablo (2020), in the eighth paper in this special issue, explores the case of the Enterprise Development Centre (EDC), an institution established by the government of Ghana and a consortium of oil and gas companies, the “Jubilee partners”. He demonstrates how an over-reliance on MNCs can negatively affect the role of LCRs in the public value creation process. Ablo reviews the factors that led to the closure of the EDC, which was established to identify, provide training and develop the capabilities of indigenous oil and gas companies in Ghana. The funds used to set up the EDC were provided by the Jubilee partners to cover a five-year period, which the state perceived as long enough for the institution to become self-sustainable. No additional funds or support systems, therefore, were put in place to support the institution. Through interviews, Ablo finds that the main reason behind the decline of the EDC was the lack of understanding and appreciation by the state of how the oil and gas industry operates. In particular, the state, through the EDC, did not help establish a good capital base for SMEs. Moreover, the ruling elite had no true intention of supporting SMEs. Rather, the establishment of the centre was a political objective, one that led citizens to perceive the government as facilitating greater local engagement in the industry. This meant when the EDC ran into problems with IOCs over the lack of procurement contracts flowing to SMEs it had

trained, the state sided with the IOCs. In the end, very few SMEs were able to secure meaningful projects with the MNCs, eventually leading to the demise of the EDC.

4.2 Operational Capacity

According to Moore (1995; 2013), ideally, public managers should consider what technical capacity they have in order to fulfil their goals. This is the part of the model that begins to lay bare the weak foundations of some LCRs: idyllic targets. Pegram et. al. (2020), in the ninth paper of this special issue, use decision trees, as well as training and development timelines, to demonstrate that IOCs will realise financial benefits from localising jobs where the local population have the requisite experience, qualifications and competencies required for a role. Many LCRs are set with stringent employment quotas. It is unclear whether or not targets or quotas will result in better outcomes (Ramdoo, 2018; Olawuyi, 2019). In Ghana, for example, an aggressive 10-year timeline was set for IOCs to achieve local employment targets of 70% as part of the country's LCRs (Ackah-Baidoo, 2012). As Pegram et al. contend that massive investments would have to be put into education, training and development to ensure that the necessary local capacity can meet the needs of IOCs for specialised roles.

Moore's (1995) ideas about operating capacity suggests a well thought through and implemented strategy that ensures the goals of public management in creating value will have every chance of being achieved. We find that the operational environment for value creation in developing countries limit their ability to perform this crucial function. When it comes to LCRs, the situation is acute because some civil service practitioners in emerging extractive hubs have limited technical capacity to support the industry and monitor compliance (Ackah-Baidoo, 2013). A further complication is the absence of the requisite resources from the state to ensure that LCRs are effectively implemented and monitored. In some countries where technical capacity exists, such as Nigeria and Brazil, corruption becomes the added layer that affects the ability to create true public value, the result of gaps in capacity in poorly-functioning public institutions.

Jacob (2020), in the tenth paper in this special issue, recounts how the attempt made by the Government of Tanzania to ban imported coal and gypsum in favour of increasing consumption of those produced locally had unintended consequences. The goal of the state had been to help propel the local mining industry and its SOE Tancoal Energy Limited ("Tancoal"), which succeeded in becoming a monopoly but was unprepared to meet the level of local demand for coal. This had a negative impact on the financial sustainability of some cement and steel manufacturing companies. There were several caveats to this bold attempt at localisation. Tancoal did not have the capacity to produce coal of equal quality to imported ones and transport networks were not sufficiently developed to ensure cost effective distribution to users. Underlying all of these difficulties was the "hard" stance (Ovadia, 2016a) that the state took towards these LCRs without due consideration for its own operational capacity to monitor and provide support for indigenous suppliers. Jacob stresses the importance of finding a good balance between "hard" and "soft" stances (Ovadia, 2016a) when trying to protect SOE interests through LCRs.

In reviewing the discussions and arguments presented in the papers contained in this special issue, the importance of Moore's (1995) "strategic framework" becomes even more evident in the context of managing LCRs in developing economies. If public management, a crucial instrument for the successful development, implementation and monitoring of LCRs, has the requisite autonomy to operate (legitimacy and support from all stakeholders), along with the technical expertise and resources (operational capacity), these standards and guidelines will be better designed and will yield much more favourable outcomes for the stakeholders involved.

5. A new crucible for cultivating LCRs?

An emerging school of thought draws attention to the success of participative budgeting in value co-creation (Harkins and Egan, 2012; Baiocchi and Ganuza, 2014; Omar et. al., 2017; Allegretti and Herzberg, 2004) to advocate for community-driven strategies to public value creation (Prahalad and Ramaswamy, 2004; Bryson et. al., 2017; Meynhardt et. al., 2015; Henson, 2019; Sancino et. al., 2018). They contest that an amendment must be made to Moore's (1995) strategic framework if true public value is to be co-created. We accept that public value co-creation must be embedded into LCRs and therefore agree to the calls for such a radical shift. However, Moore (1995) calls for public management to engage in organisational learning. We believe that the issues identified in the papers in this special issue do just this. Identifying the barriers preventing good outcomes offers SOEs and state agencies learning opportunities which may inform subsequent approaches to the development, implementation and monitoring of LCRs. From our bird's eye view of the positive outcomes that have now been realised from current LCRs, we are able to share best practices and suggest ways for improving upon current strategies.

Murat and Islam (2019) contend that LCRs that create optimal public value differ between extractive and non-extractive industries. It is obvious from the papers discussed so far that LCRs are valuable and beneficial to indigenes and states in developing economies. Lebdioui (2020), in the eleventh paper in this special issue, compares experiences from Chile and Malaysia's LCRs to shed light on the critical success factors in local content policy design and implementation. The author's findings demonstrate that putting into place the right mechanisms ensures a high-level realisation of LCRs. Reflecting on the two experiences, Lebdioui notes that a favourable outcome is achieved with implementation of an aggressive local content policy premised on the protection of an infant industry, development of local capacity and targeted industrial policies which promote the accumulation of local content capabilities through the promotion of R&D, specialized human capital, intra-industry dialogue and learning by doing. In Malaysia, this approach is propelled by the SOE, Petronas, and has resulted in the emergence of globally competitive local suppliers. Targets were set in the country to establish strong linkages with other sectors and to increase value-added.

However, in Chile, the state, for a long period of time took a *laissez-faire* approach, resulting in the development of internationally competitive local suppliers being hindered by market failures, shy public incentives for innovation, skilled human capital accumulation, and learning by doing. The success of recent efforts by BHP Billiton in association with National Commission for Mining and Development (COCHILCO) has underscored the need for sustainable local content policies that build competitiveness as well as address several market failures that prevent the development of domestic capabilities.

Aron and Molina (2020), in the twelfth paper in this special issue, examine how opportunities have emerged for suppliers who offer green innovations in response to concerns about climate change and environmental preservation. As the green suppliers industry is not well established, most of the companies are at an embryonic stage of their development, and therefore require state support as well as financial investments from MNCs in the extractive industries in order to meet the requisite level of education, training in engineering and R&D. Supporting companies in the green suppliers industry may offer developing economies a niche economic advantage.

Indeed, LCRs which are focused on creating public-value with well-governed SOEs at the helm have a greater potential to succeed and create formidable local linkages. Bainton and Jackson (2020), in the thirteenth paper in this special issue, argue that the costs of mining projects are generally well understood but the benefits may be less so. They use mining in Papua New Guinea to establish that evidence may not support the idea that the benefits imagined are actually

facilitating broad-based development or that it can be sustained over the long-term (post mine closure). In their view, a project-by-project approach of comparing costs to benefits yield better data from which to effectively measure the outcomes of LCRs. This is where there is scope for LCRs to find ways to connect the dots on projects in the life cycle of a company in the extractive industries.

6. Concluding Remarks: Reflecting on the Past and Searching for New Directions

A state is responsible for creating value for its citizenry. Natural resources provide a unique source of revenue for states in developing economies: if well managed, they have the potential to transform economies through LCRs which help develop local businesses and catalyse industrial linkages to and from the extractive industries. Central to the effective management of natural resources through LCRs, however, is the role played by SOEs and state agencies in the area of public management. As has been demonstrated above, SOEs, which are largely governed autonomously while still focused on helping to deliver on the national development agenda, are crucial to success of LCRs. In creating value, the management of an SOE must ensure that it takes into account the views of multiple stakeholders, foremost those of affected communities and civil society.

In this paper, we draw from Moore's (1995) strategic framework to underscore the gaps in policy implementation around LCRs in the extractive industries, in the process, setting the stage for the ideas shared by the authors in this special issue. Kuittinen (n.d) argues that "the real meaning of co-creation and participatory processes is not listening to more opinions and fine-tuning the outcomes accordingly but honestly open-ended deliberation and distributed decision-making on things that matter... [– that] In many developing economies little input for decision-making on LCRs is taken from communities where the minerals are found (Nwapi, 2015). Although not without their flaws, in countries such as Canada and Australia, the government and companies are legally required to consult with indigenous peoples before launching their projects (Guevara et. al., 2019; Buhr, 2012;). As is made clear in some of the case studies covered in this special issue, this approach to value-creation has proved somewhat problematic in areas where existing social structures often require consulting elite stakeholders and not the general community. In developing countries in particular, the idea of citizen-led value creation is still in its infancy, which often renders community initiatives problematic (Chaskin, 2003; Boonstra and Boelens, 2011; Jones and Ormston, 2014; Edelenbos et. al., 2018). Such engagement is often seen as implying "a transfer of power, and therefore require a transfer of responsibility, accountability and legitimacy" (Duijn and Van Popering-Verkerk, 2018, p.4). We contend here that broader engagement helps to eliminate elite capture while simultaneously ensuring or enhancing legitimacy of the decision-making of the state and its SOEs.

In conclusion, we argue, based on evidence presented in the papers in this special issue, that LCRs are context specific, they must be clearly distinguishable from CSR programmes, they must truly engage civil society and affected communities, and *soft* and *voluntary* targets do not yield required outcomes. In driving LCRs, SOEs and state agencies have a unique role in creating public value. But aligning their goals with national objectives along with imposing deliberate restrictions on the activities of MNCs in the extractive industries is bound to result in meaningful public value creation in natural resource-rich developing economies.

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